

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 2, 5-8, 10-12 and 14-17; and ADD new claims 18-21 in accordance with the following:

1. **(original)** A storage medium storing:
moving picture data having a plurality of playback routes;
a plurality of subtitle data items corresponding to the playback routes and supporting random search for a subtitle; and
mapping information linking the moving picture data and the subtitle data.
2. **(currently amended)** The storage medium of claim 1, wherein the subtitle data ~~includes~~ comprises:
reference offset information indicating reference information to randomly search for a subtitle of a desired time at a high speed and reproduce the subtitle,
text data containing subtitle contents that are to be converted into pixel data and output,
style information specifying an output style of the pixel data, and
control information to control the output of the ~~converted~~ pixel data.
3. **(original)** The storage medium of claim 2, wherein by using information on a time elapsed from the reference offset information, the subtitle of a desired time is randomly searched for at a high speed among the subtitle data.
4. **(original)** The storage medium of claim 3, wherein the reference offset information includes a cell identifier (VOB_ID and CELL_ID) of a video object that is a recording unit of the storage medium, or a start position of a clip that is a recording unit of the storage medium.
5. **(currently amended)** The storage medium of claim 2, wherein the subtitle data is

described in ~~the~~a form of a markup language or a binary table.

6. **(currently amended)** The storage medium of claim 5, wherein, where ~~in~~ the subtitle data is described in the form of a binary table, ~~the table~~:

the style information, the control information, and the text information have respective identifiers for distinguishing each other, ~~and~~

the control information includes ~~indication~~ information indicating the style information and the text information corresponding to the control information, and ~~in order to reduce a search time by integer calculation when random search is performed, the~~

the size of each of the style information and the control information is predetermined and sequentially recorded in a predetermined area.

7. **(currently amended)** The storage medium of claim 2, wherein the style information ~~includes~~ comprises at least one among information items on the width and height of the pixel data area, a background color, a time when the pixel data is to be stored and deleted in a buffer memory, a starting point from which subtitle text is rendered, line spacing, output direction, bold type and Italic type of subtitle text, line break, color of subtitle text, and information on character code encoding.

8. **(currently amended)** The storage medium of claim 2, the control information ~~includes~~ comprises at least one among information items on an area on which the pixel data is to be output on ~~the~~ an entire screen, a start point of subtitle text in the area, and a synchronization time indicating when the pixel data is to appear and disappear in synchronization with the moving picture data.

9. **(original)** The storage medium of claim 8, wherein the synchronization time information is expressed as a lapse time from a reference cell (CELL) of a video object (VOBU) that is reference offset information of the moving picture data, or as a lapse time from a start position of a clip that is reference offset information of the moving picture data.

10. **(currently amended)** The storage medium of claim 9, wherein the synchronization time information is expressed by using a present time stamp (PTS) time ~~on the basis of~~based on a reference time for reproducing moving pictures.

11. **(currently amended)** The storage medium of claim 1, wherein the subtitle data or the mapping information further ~~includes~~comprises at least one among font information describing ~~the~~a font of subtitle data to be displayed on ~~the~~a screen, information on a producer making the subtitle, packet identifier (PID) information of the subtitle data to distinguish from the moving picture data, and subtitle indication information by language of the subtitle data.

12. **(currently amended)** ~~An reproducing apparatus~~ for reproducing a storage medium on which moving picture data having a plurality of playback routes is recorded, the apparatus comprising:

a decoder decoding the moving picture data having ~~a~~the plurality of playback routes;
and

a subtitle processor;
converting subtitle data corresponding to a selected route into pixel data,
~~predetermined route and selected by using a plurality of subtitle data items corresponding to the~~
plurality of playback routes and supporting a random search, for a subtitle and mapping
information linking the moving picture data and the corresponding subtitle data, into pixel data,
and

synchronizing the converted pixel data with the moving picture data, and
outputting the pixel data.

13. **(original)** The apparatus of claim 12, wherein the subtitle processor comprises:
a text subtitle decoder identifying subtitle data corresponding to the moving picture data of a route to be reproduced by parsing the mapping information, and converting the identified subtitle data into pixel data by parsing the subtitle data; and

a graphic controller controlling the pixel data by using the parsed mapping information and subtitle data such that the pixel data is synchronized with the moving picture data and output.

14. **(currently amended)** The apparatus of claim 13, wherein: ~~in the subtitle data, by decoding the subtitle data, the text subtitle decoder:~~

parses reference offset information indicating reference information to randomly search for a subtitle of a desired time at a high speed ~~and to reproduce the subtitle, text data containing subtitle contents that are to be converted into pixel data and output, style information specifying an output style of the pixel data, and control information to control the output of the converted pixel data, data, and~~

~~based on the style information, converts the text data into pixel data based on the style information, and by using the parsed control information,~~

~~the graphic controller controls such that~~synchronizes ~~the converted pixel data is synchronized with the moving picture data and outputs the synchronized moving picture data and pixel data using the parsed control information.~~

15. **(currently amended)** The apparatus of claim 14, wherein the text subtitle decoder randomly searches the subtitle data for the subtitle of a desired time at a high speed by using information on a time elapsed from the parsed reference offset information.

16. **(currently amended)** The apparatus of claim 15, wherein the graphic controller controls the converted pixel data to be synchronized with the moving picture data by using synchronization time information expressed as a lapse time from a reference cell (CELL) of a video object (VOBU) that is reference offset information of the moving picture data, or as a lapse time from a start position of a clip that is reference offset information of the moving picture data. ~~data, the graphic controller controls the converted pixel data to be synchronized with the moving picture data and output.~~

17. **(currently amended)** A method ~~for of~~ reproducing data on a storage medium storing moving picture data having a plurality of playback routes, a plurality of subtitle data items corresponding to the playback routes and supporting random search for a subtitle, and mapping information linking the moving picture data and the subtitle data, the method comprising:

reading the subtitle data corresponding to moving picture data of a route to be reproduced by parsing the mapping information;

identifying subtitle data of a position to be reproduced according to continuous

reproduction or reproduction by random search, by parsing the subtitle data, and converting the subtitle data into pixel data; and

synchronizing the ~~converted~~ pixel data with the moving picture data and outputting the pixel data.

18. **(new)** The method of claim 17, further comprising:

combining the pixel data with the moving picture data to display subtitles on a screen.

19. **(new)** The storage medium of claim 1, wherein:

the moving picture data of the each playback route and the corresponding subtitle data items are linked using a markup language.

20. **(new)** The storage medium of claim 1, wherein:

the moving picture data and each playback route and the corresponding subtitle data are linked using a table.

21. **(new)** The storage medium of claim 20, wherein the table is a binary table.